

TSMC-01-167CB

January 5, 2004

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/696,432 10/29/03 |
| Ying-Lang Wang et al. |
| IMPROVED CMP PROCESS LEAVING NO |
| RESIDUAL OXIDE LAYER OR SLURRY |
PARTICLES

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56. Copies of each document is included herewith.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited with the United States Postal Service as first class
mail in an envelope addressed to: Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450, on January 27, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

SB Ackerman 1/27/04

U.S. Patent 5,662,769 to Schonauer et al., "Chemical Solutions for Removing Metal-Compound Contaminants from Wafers After CMP and the Method of Wafer Cleaning," discloses a tungsten CMP process and post clean.

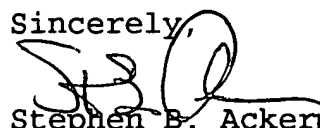
U.S. Patent 6,165,956 to Zhang et al., "Methods and Apparatus for Cleaning Semiconductor Substrates after Polishing of Copper Film," discloses a tungsten CMP together with NH₄OH brushing in the background section.

U.S. Patent 5,968,280 to Ronay, "Method for Cleaning a Surface," discloses a poly-electrolyte post CMP clean.

U.S. Patent 5,868,863 to Hymes et al., "Method and Apparatus for Cleaning of Semiconductor Substrates Using Hydrofluoric Acid (HF)," discloses a cleaning method and apparatus using very dilute hydrofluoric acid (HF) for cleaning silicon wafers and semiconductor substrates.

U.S. Patent 6,207,630 to Vaartstra, "Processing Compositions and Methods of Using Same," discloses compositions and methods for using such compositions in the removal of contaminants from substrates and equipment.

Sincerely,



Stephen B. Ackerman, Reg. #37761

Form PTO-1449

Document Number (Optional)

Application Number

TSMC-01-167CB

10/696,432

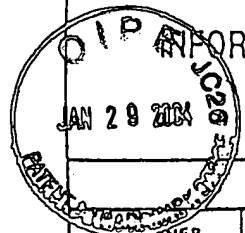
Applicant

Ying-Lang Wang et al.

Filing Date

10/29/03

Group Activity



INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5662769	9/2/97	Schonauer et al.	438	633	2/21/95
	6165956	12/26/00	Zhang et al.	510	175	10/21/97
	5968280	10/19/99	Ronay	134	2	11/12/97
	5868863	2/9/99	Hynes et al.	134	28	1/30/97
	6207630	3/27/01	Vaartstra	510	175	1/6/00

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.